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himself well within the limiting parallels, watched with confidence for the occultation of ζ *Tauri.* But his surprise may be imagined when he found that the Moon's lower limb at its nearest approach was in his estimation at least 10′ north of the star. He records the words "no occurrence," and leaves us to infer that he has discovered an important error in the *Nautical Almanac.*

If there be many observers who take it for granted that an occultation must occur at all latitudes within the limiting parallels, then I fear the *Nautical Almanac* will get a bad name.*

I have calculated the limiting parallels, which I find the same as in the *Nautical Almanac.* And a calculation for the position given above shows that the nearest approach of the Moon's centre to the star was 19′·3. The moon's lower limb was, therefore, within 4′·5 of the star. This differs materially from Mr. Spear's 10′. The question, however, is not one of proximity, but whether a limiting parallel in such a case as this is a delusion and a snare.

Norwich, Nov. 13, 1871.

Discovery of the Minor Planet (118) *Peitho.*

This planet was discovered by Dr. R. Luther, at Bilk, near Dusseldorf, on March 15, 1872. It was of the eleventh magnitude. The following elements have been calculated by Professor Theodore von Oppolzer, from observations made on March 15, 26, and April 4:—

Epoch, 1872, March 31·0, Berlin Mean Time.

$$\begin{array}{lcl} L & = & 160^{\circ}\;53'\;44''\!\cdot\!7 \\ M & = & 84\;\;25\;\;12\cdot3 \\ \pi & = & 76\;\;28\;\;32\cdot4 \\ \text{Node} & = & 47\;\;14\;\;25\cdot5 \\ \iota & = & 7\;\;50\;\;11\cdot3 \\ \phi & = & 9\;\;51\;\;25\cdot0 \\ \mu & = & 928''\!\cdot\!402 \\ \log a & = & 0\cdot388181 \end{array}$$

(π, Node, ι:) Mean Equinox 1872·0

Sidereal revolution = 1396 days.

[* In the Explanation of the Elements of Occultations, at the end of the *Nautical Almanac*, it is stated that "by Limiting Parallels are to be understood those parallels of latitude beyond which an occultation cannot *possibly* occur. . . . Limiting parallels are useful to indicate whether, at a given conjunction of a star with the Moon, the positions are likely to produce an occultation in a given latitude, and thus to save considerable labour to the computer." Ed.]

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The following ephemeris may serve for comparison with the observations:—

12^h Berlin M.T.	R.A.	N.P.D.	Log Δ.
	h m s	° ′	
April 4	11 48 22	78 50·7	
8	11 45 11	78 48·8	0·194
12	11 42 22	78 50·8	
16	11 39 55	78 54·5	0·212
20	11 37 54	79 1·9	
24	11 36 18	79 12·0	0·232

Peitho is the nineteenth minor planet discovered by Dr. R. Luther.

April 10, 1872.

Observations of the small Planets Peitho (118) *and Egina* (91), *of six new Nebulæ, and a Variable Star.* By M. Alph. Borrelly, Assistant Astronomer at the Marseilles Observatory.

(*A Letter to the President.*)

I have the honour of forwarding to you two observations of the small planets *Peitho* (118) and *Egina* (91). To these I add, in like manner, the positions of six new nebulæ, and of a variable star.

Observation of the Planet (118) *Peitho.*

	Marseilles M.T.	App. R.A.	Log. f. par.	App. Decl.	Log. f. par.
1872, Mar. 27	$8^h44^m35^s$	$11^h55^m41^s \cdot 75$	1·4501	$+10°56'19''\cdot 7$	0·7012

Comparison Star.

	Magnitude.	Mean R.A. for 1872·0.	Correction for Date.	Mean Decl. for 1872·0.	Correction for Date.
932 Weisse, H. 11	9	$11^h54^m58^s \cdot 51$	$+0^s \cdot 98$	$+11°3'56''\cdot 85$	$-5''\cdot 48$

The planet is of 11–12 magnitude.

Observations of the Planet (91) *Egina.*

	Marseilles M.T.	App. R.A.	App. Decl.
1872, March 13	$10^h30^m57^s$	10^h 02	$+14°7'35''\cdot 9$

Comparison Star.

	Magnitude.	Mean R.A. for 1872·0.	Correction for Date.	Mean Decl. for 1872·0.	Correction for Date.
3475 B.A.C.	6	$10^h4^m45^s \cdot 16$	$+0^s \cdot 82$	$+13°59'9''\cdot 13$	$-2''\cdot 6$

The planet is of the 11th magnitude.

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